

Slag

What is slag?

- While there is no regulatory definition, slag is formed during the metal-making process and contains unwanted impurities from the ore or raw materials used. Slag is formed as a molten liquid solution of silicates and oxides that solidifies upon cooling.
- Slag is generated at industrial facilities, integrated mills, “mini-mills” and foundries. Iron and steel slag account for the largest volume produced in Indiana.
- The U.S. EPA considers many types of slag a solid waste and not a hazardous waste. Slag that is not exempt from the hazardous waste rule must make a hazardous waste determination. The hazardous waste determination is based on manufacturer’s information and/or testing.

What happens to slag?

- Slag is used in building and road construction, cement manufacture, concrete aggregates and glass manufacture.
- Much of the iron and steel slag is recycled inside integrated and mini-mills. What is not reprocessed is usually sent to landfills for disposal.
- Foundry slag has not been widely used in Indiana, but greater interest is being expressed.
- The Indiana Department of Transportation (INDOT) has recently written new testing requirements for some slag to better determine the content. The slag must pass these new tests before use in INDOT projects.

How is IDEM regulating the use of slag?

- IDEM regulates the disposal of slag under its solid or hazardous waste rules.
- The Solid Waste Management Board, established by Indiana statute to adopt rules regulating solid and hazardous waste, can not regulate the production, transportation, storage, processing or legitimate use of iron and steel slag.
- IDEM is authoring guidance regarding the use of foundry slag.

Where can I get more information?

- For more information, contact the Indiana Department of Environmental Management, Compliance and Response Branch at (317) 308-3103 or visit the Indiana state Web site at <http://www.in.gov/legislative/ic/code/title13/ar19/ch3.html> and go to Section 8 to read legislation regarding slag.